

PATENT CLAIMS

1. A method in the transmission in a data communications network, particularly Internet, of arbitrarily formatted files comprising one or more different data types, between a sender (1) comprising a data-processing device (2) connected to the data communications network, wherein the sender (1) represents an information provider, and one or more receivers (8) with respective data-processing devices (2) connected with the data communications network, wherein each receiver (8) represents a user, wherein the transmission takes place via a dedicated server (5) provided in or assigned to the data communications network, wherein files which shall be transmitted are stored in a database (3) at the sender (1) or in a database (4) accessible from the sender (1) and which, for the transmission that substantially takes place transparently for both sender (1) and receiver (8), are downloaded to the data-processing device (2) of the sender (1), and wherein the method is characterized by processing a file specifically for one or more users and/or one or more applications under determined conditions, the specific processing taking place consecutively in a data-processing device (6) of the server (5) during the transmission and/or consecutively in the data-processing device of the receiver (8) as the file is received and/or in the data-processing device of the receiver (8) after the file has been received, and performing the specific processing with software which is stored in one or more of the following: the sender (1), the server (5) or the receiver (8), and, as required, is transmitted before or in phase with the processing to an actual processing location.
2. A method according to claim 1, characterized by comprising consecutive or approximately simultaneous and/or or interfoliated realized steps for:
- a) compression-coding the file which shall be transmitted with a proprietary data compression procedure or a general loss-free data compression procedure,

b) dividing the compression-coded file in packets,
c) transmitting the packet-divided compression-coded file to the
dedicated server together with receiver addresses,

d) providing the packets with receiver address, and

5 e) transmitting the compression-coded file to one or more receivers
(8) according to the receiver addresses of the packets, as well as a further
step, for

f) decoding the received file at the receiver (8) according to the data
compression procedure or procedures already used for the compression
10 coding.

3. A method in transmission in a data communications network,
particularly Internet, of arbitrarily formatted files comprising one or more
different data types, between a sender (1) comprising a data-processing
device (2) connected to the data communications network, wherein the
15 sender (1) represents an information provider, and one or more receivers
(8) with respective data-processing devices connected with the data
communications network, wherein each receiver (8) represents a user,
wherein transmission takes place via a dedicated server (5) provided in or
assigned to the data communications network, wherein files which shall be
20 transmitted are stored in a database (3) at the sender (1) or in a database
(4) accessible from the sender (1) and which for the transmission that
substantially takes place transparently for both sender (1) and receiver (8),
are downloaded to the data-processing device (2) of the sender (1), and
wherein the method is characterized by comprising consecutive or
25 approximately simultaneous and/or interfoliated realized steps for

a) compression-coding the file which shall be transmitted with a
proprietary data compression procedure or a general loss-free data
compression procedure,

b) dividing the compression-coded file in packets,

30 c) transmitting the packet-divided compression-coded file to the

dedicated server (5) together with receiver addresses,

d) providing the packets with receiver address, and

e) transmitting the compression-coded file to one or more receivers

(8) according to the receiver addresses of the packets, and as well as

5 further steps for

f) decoding the received file at the receiver (8) according to the data compression procedure or procedures already used for the compression coding, and

g) additionally processing the files specifically for one or more
10 users and/or for one or more applications under determined conditions, the specific processing taking place consecutively in a data-processing device (6) of the server (5) during the transmission and/or consecutively in the data-processing device of the receiver (8) as the file is received and/or in the data-processing device of the receiver (8) after the file has been
15 received, and performing the specific processing with software which is stored in one or more of the following: the sender (1), the server (5) or the receiver (8) and which, as required, is transmitted before or in phase with the processing to an actual processing location.

4. A method according to claim 3,

20 characterized by the sender (1) simultaneously with the initialization of the transmission of during or after the transmission to the server (5) sending a message to the receiver (8) with a resource address and an access code and receiving a confirmation from the server (5) when the latter has received the file and the confirmation from the receiver (8)
25 when the latter has received the file and downloaded it to its data-processing device.

5. A method according to claim 3, wherein the arbitrarily formatted file comprises one or more of the following data types, viz. image data, alphanumeric data, graphic data and fonts,

30 characterized by using the proprietary data compression procedure

for compressing image data, and by using the general loss-free compression procedure substantially for compression of alphanumeric data, graphics data and fonts.

6. A method according to claim 3,
5 characterized by storing software for data compression coding and decoding in the server (5) and downloading said software automatically respectively to the data-processing device (2) of the sender (1) for coding the file when the transmission is initialized and to the data-processing device of the receiver (8) for decoding the file when it is received.
- 10 7. A method according to claim 3,
characterized by the packet division taking place dependent on the data type, such that each packet comprises a determined data type.
8. A method according to claim 3,
characterized by the specific processing taking place in the server
15 (5) after a preceding decoding of the file in the server by means of the software for the data compression coding, the software for the specific processing either being stored at the sender (1) and/or at the receiver (8) and being transmitted to the data-processing device (6) of the server (5) when the processing shall take place, or beforehand stored in the
20 data-processing device (6) of the server (5), and after the specific processing again compression-coding the file with software stored in the server (5) for transmission to the receiver (8), the server (5) on the basis of the receiver address checking whether processing conditions are present.
- 25 9. A method according to claim 8,
characterized by the processing conditions assigned to a determined receiver address being stored in the server (5) together with software for the processing and being accessed by the server (5) on the basis of the receiver address.

10. A method according to claim 8,
characterized by performing the specific processing on one or more
determined data types such that only packets comprising the determined
data type are decoded before the processing and coded anew after the
5 processing has terminated.
11. A method according to claim 3,
characterized by the decoding of the file at the receiver (8) taking
place consecutively as the file is received.
12. A method according to claim 11,
10 characterized by the specific processing taking place consecutively
in the data-processing device of the receiver (8) before and/or after the
decoding of the file which is received, the software for the processing
either being stored at the receiver (8) and/or in the sender (1) and/or in the
server (5) and being transmitted to the data-processing device (6) or the
15 receiver (8) when processing shall take place or beforehand being stored
in the data-processing device of the receiver (8).
13. A method according to claim 3,
characterized by storing the file as it is received in the
data-processing device of the receiver (8), and then decoding the file by
20 the receiver (8) at a later suitably selected time.
14. A method according to claim 13,
characterized by the specific processing of the stored file taking
place in the data-processing device (6) of the receiver (8) before and/or
after the decoding of the file, the software for the processing either being
25 stored at the sender (1) and/or in the server (5) and transmitted to the
data-processing device (6) of the receiver (8) when processing shall take
place or beforehand entered in the data-processing device (6) of the
receiver (8).

15. A method according to claim 3,
characterized by the dedicated server (5) being implemented on a
general network server at the sender (1).

16. A method according to claim 3,
5 characterized in that user names, receiver addresses, files and the
given processing conditions assigned to user names or receiver addresses
temporarily or permanently are stored in a database (7) provided in the
server (5).